PENDING CLAIMS

Docket No.: 14113-00040-US

1. (Original) An optionally substituted oligomer or polymer comprising a repeat unit of formula (I):

$$\begin{array}{c|c}
Ar^{1} - A - A - Ar^{2} - A - Ar^{3} - Ar^{1}
\end{array}$$
(I)

wherein n is at least 1; each A is a nitrogen atom or optionally substituted phosphorus atom; each Ar^1 is the same or different and independently represents an optionally substituted arylene or heteroarylene; each Ar^3 is the same or different and independently represents an optionally substituted arylene or heteroarylene comprising a linking ring to which the two atoms A are both directly linked; and at least one of Ar^2 , and / or either or both of Ar^1 is substituted with at least one substituent.

- 2. (Original) An oligomer or polymer according to claim 1 wherein the substituent on Ar^1 or Ar^2 is selected from the group consisting of optionally substituted, aliphatic or alicyclic C_{1-20} alkyl; C_{1-20} fluoroalkyl; C_{1-20} alkoxy; halogen; nitro; cyano; sulfone and sulfoxide.
- 3. (Previously presented) An oligomer or polymer according to claim 1 wherein Ar² carries one or two substituents only.
- 4. (Previously presented) An oligomer or polymer according to claim 1, wherein each Ar¹ and Ar² are phenyl.
- 5. (Previously presented) An oligomer or polymer according to claim 1, wherein Ar³ is optionally substituted phenyl.
- 6. (Previously presented) An oligomer or polymer according to claim 1, wherein the oligomer or polymer comprises at least a second repeat unit.
- 7. (Original) An oligomer or polymer according to claim 6 wherein the further repeat unit is conjugated to the first repeat unit.

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8. (Previously presented) An oligomer or polymer according to claim 6 wherein any further repeat unit is selected from optionally substituted phenyl, fluorene, spirobifluorene, indenofluorene, heteroaryl, dihydrophenanthrene or triarylamine.

- 9. (Previously presented) An oligomer or polymer according to claim 1, wherein at least one Ar^3 is substituted by a substituent selected from the group consisting of optionally substituted, branched, cyclic or linear C_{1-20} alkyl or C_{1-20} alkoxy; C_{1-20} fluoroalkyl and fluorine.
- 10. (Previously presented) A blend comprising the oligomer or polymer according to claim 1, and an organic compound capable of at least one of the functions of hole transport, electron transport and emission.
- 11. (Original) An optionally substituted monomer of formula (II):

$$LG\left(Ar^{1}-A-A-Ar^{2}-A-Ar^{3}-Ar^{3}\right)LG$$
(II)

wherein n is at least 1;

each A is a nitrogen atom or optionally substituted phosphorus atom;

each Ar¹ is the same or different and independently represents an optionally substituted arylene or heteroarylene;

each Ar³ is the same or different and independently represents an optionally substituted aryl or heteroaryl;

 Ar^2 represents an optionally substituted arylene or heteroarylene comprising a linking ring to which the two atoms A are both directly linked; and at least one of Ar^2 , and / or either or both of Ar^1 is substituted with at least one substituent

LG is the same or different and represents a leaving group capable of participating in a polycondensation mediated by a metal of variable oxidation state; and at least one of Ar^2 and / or either or both of Ar^1 is substituted with at least one substituent.

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12. (Previously presented) A monomer according to claim 11 wherein each LG is the same or different and is independently a halogen; a reactive boronic group selected from a boronic acid group, a boronic ester group and a borane group; or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl.

- 13. (Previously presented) A method of forming an oligomer or polymer comprising the step of oligomerising or polymerising a monomer according to claim 11 wherein said oligomerisation or polymerisation is mediated by a metal of variable oxidation state.
- 14. (Previously presented) A method according to claim 13 wherein each LG is independently a halogen or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl, and the monomer of formula (II) is oligomerised or polymerised in the presence of a nickel complex catalyst.
- 15. (Previously presented) A method according to claim 14 wherein the monomer of formula (II) is oligomerised or polymerised with a second aromatic monomer in the presence of a palladium complex catalyst and a base and
- a. each LG is the same or different and comprises a reactive boronic group and the second monomer comprises two reactive groups independently selected from halogen and a moiety of formula -O-SO₂-Z as defined in claim 12, or
- b. each LG independently comprises a halogen or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl, and the second monomer comprises two reactive boron groups which are the same or different.
- 16. (Previously presented) A method according to claim 13 wherein one LG is a reactive boron group; the other LG is a halogen or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl, and the monomer of formula (II) is oligomerised or polymerised in the presence of a palladium complex catalyst and a base.
- 17. (Previously presented) An optical device comprising the oligomer or polymer according to claim 1.
- 18. (Previously presented) An optical device comprising the blend according to claim 10.

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19. (Previously presented) An optical device according to claim 17 wherein the oligomer or polymer or blend is located in a layer between a first electrode for injection of holes and a second electrode for injection of electrons.

- 20. (Previously presented) An optical device according to claim 17, wherein the optical device is an electroluminescent device.
- 21. (Previously presented) A switching device comprising an oligomer or polymer according to claim 1.
- 22. (Previously presented) A field effect transistor comprising an insulator having a first side and a second side; a gate electrode located on the first side of the insulator; an oligomer or polymer according to claim 1 located on the second side of the insulator; and a drain electrode and a source electrode located on the oligomer or polymer.
- 23. (Original) An integrated circuit comprising a field effect transistor according to claim 22.

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